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EXAMINER	
COLUCCI, MICHAEL C	

ART UNIT	PAPER NUMBER
2626	

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12/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/726,102	AGAPI ET AL.	
	Examiner	Art Unit	
	MICHAEL C. COLUCCI	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/08/2009 have fully considered but they are not persuasive.

Argument (page 6 paragraph 3):

- "The Office Action concedes that Ehsani fails to teach "adding a representation of a second prompt to the call flow representation" or "adding a representation of a third prompt to the call flow representation the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option." However, the Office Action asserts that Mark discloses these limitations. Applicant respectfully disagrees that Marx discloses such features"

Response to argument:

NOTE: Examiner would like to remind Applicant of the following:

"USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without

importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings."). Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." Multiform Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01."

Please consider that while giving claims their broadest reasonable interpretation in light of the supporting disclosure without importing limitations from the specification into the claims unnecessarily, Examiner believes that Ehsani in view of Marx appears to teach the limitations of claims 24 and 25 and is within the scope of the claims, that is "a method for generating a speech recognition application call flow from a call flow representation of the speech recognition application call flow specified by a designer using a user interface configured to allow the designer to create the call flow representation".

Examiner believes that Marx specifically cures any deficiencies resulting from Ehsani, wherein Marx specifically teaches grammar sets such as vocabularies, where selecting the Vocabulary option 940 from the window 900 of FIG. 9 allows a developer to customize the recognized vocabulary defining valid response to a Dialogue Module prompt. Some Dialogue Modules, such as the Yes/No Module, can use a completely defined default vocabulary, although such vocabularies may be customized or substituted by the developer. Other Dialogue Modules, such as the ItemList Module, while they may be used with a general standard vocabulary, are more suited for customized vocabularies. In this embodiment, selecting the Vocabulary option 940 opens a window 1200 such as that shown in FIG. 12. FIG. 12 shows a vocabulary editor, which is a tool for customizing vocabularies for Dialogue Module instances. An example of an appropriate editor is the Vocabulary Editor, available in SpeechWorks.TM., commercially available from Applied

Language Technologies, Inc. of Boston, Mass. The SpeechWorks.TM. Vocabulary Editor allows a developer to create or modify a recognized vocabulary, defining a list of terms that will be recognized in response to a prompt. The initial window 1200 shown in FIG. 12 includes menu options to create a new vocabulary file 1210, open an existing file 1220, or exit 1230. (Marx 18 line 47 – Col. 19 line 7 & Fig. 15).

Re prior art not teaching:

"adding a representation of a second prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the second prompt, the second prompt to be provided to the user should the user respond to the first prompt with one of the valid responses defined in the at least one grammar"

"adding a representation of a third prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the third prompt, the third prompt to be provided to the user should the user respond to the first prompt with the response option"

Consider that Marx teaches multiple prompts, where a user interface for the design and implementation of a call flow (Fig. 7) having a set of parameters and recognized vocabularies, an application that outputs an audible speech signal to the

caller by, for example, playing a prerecorded prompt or using a speech generator such as text-to-speech converter:

Prompt 1:

"If you know the name of the person you wish to speak to, please say the first name followed by the last name now. If you would like to speak to an operator, please say `Operator` now."

The application then waits for a response from the caller (130) and processes the response when received (140). If the caller says, for example, "Mike Smith," the application must be able to recognize what the caller said and determine whether there is a Mike Smith to whom it can transfer the call. Robust systems should recognize common variations and permutations of names. For example, the application of FIG. 1 may identify members of a list of employees of Company A by their full names--for example, "Michael Smith." However, the application should also recognize that a caller asking for "Mike Smith" (assuming there is only one employee listed that could match that name) should also be connected to the employee listed as "Michael Smith." Assuming the application finds such a person, the application outputs a confirming prompt:

Prompt 2 (In vocabulary?):

"Do you mean `Michael Smith`?" (150).

The application once again waits to receive a response from the caller (160) and when received (170), takes appropriate action (180). In this example, if the caller responded "Yes," the application might say "Thank you. Please hold while I transfer your call to Michael Smith," before taking the appropriate steps to transfer the call. FIG. 2 shows some of the steps that are performed for each interactive step of the interactive application of FIG. 1. Specifically, applying the process of FIG. 2 to the first interaction of the application described in FIG. 1, the interactive speech application outputs the prompt of step 120 of FIG. 1 (210). The application then waits for the caller's response (220, 130). This step should be implemented not only to process a received response, as shown in the example of FIG. 1 (140), but also to handle a lack of response. For example, if no response is received within a predetermined time, the application can be implemented to "time out" (230) and reprompt the caller (step 215) with an appropriate prompt such as

Prompt 3 (Initially not in vocabulary):

"I'm sorry, I didn't hear your response. Please repeat your answer now,"

and return to waiting for the caller's response (220, 130) (Marx Col. 1 lines 30-67).

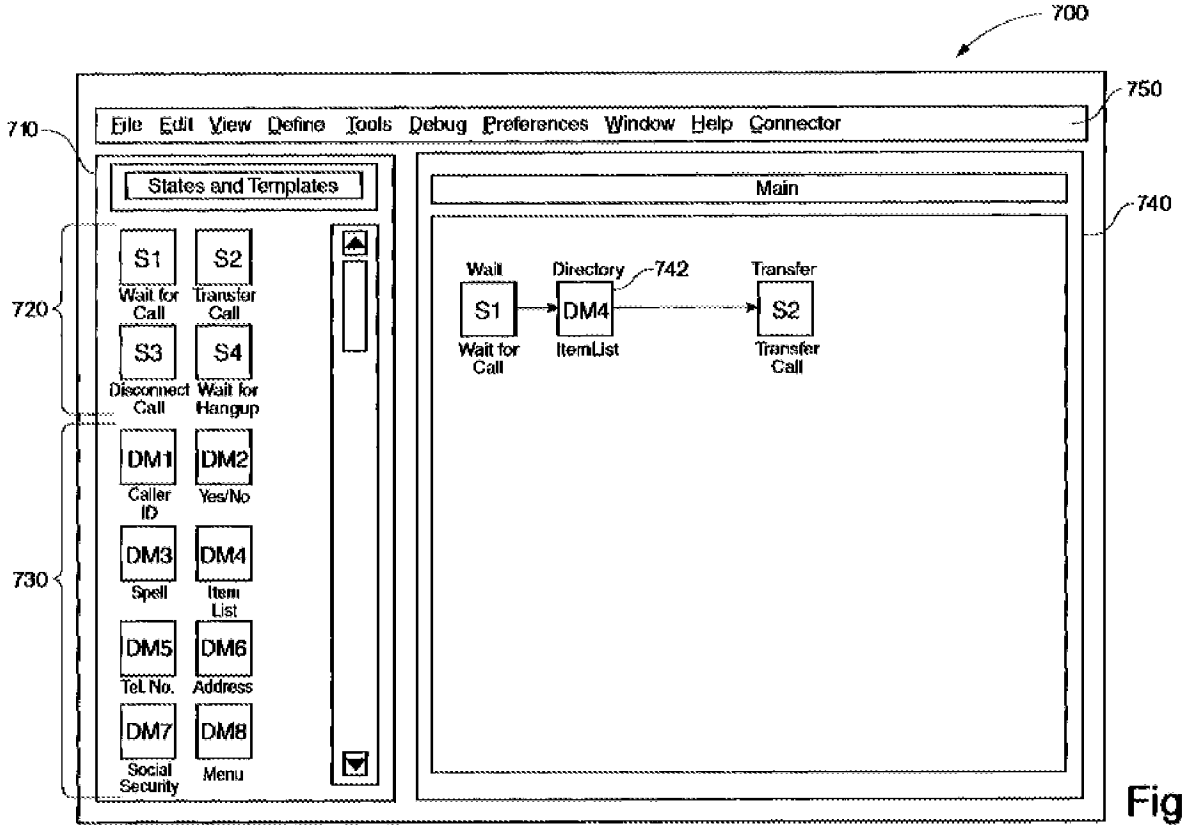

Fig. 7

In other words, Marx teaches the capability of the addition of responses and corresponding prompts to a call flow based on preexisting vocabularies or customized vocabularies, both of which can be updated and/or selected from a list during a call flow, for example a Spanish speaking customer may require a Spanish vocabulary at some point during voice interaction, so an English and Spanish vocabulary may be added, as well as a customer based vocabulary (e.g. Marx Col. 9 lines 40-51, Spanish vocabulary).

Applicant is encouraged, if necessary, to schedule an interview to propose amendments to overcome Examiners prior art of record and continue prosecution efficiently

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehsani et al. US 20020032564 A1 (hereinafter Ehsani) in view of Marx et al. US 6173266 B1 (hereinafter Marx).

Re claims 24 and 25, Ehsani teaches a method for generating a speech recognition application call flow from a call flow representation of the speech recognition application call flow specified by a designer using a user interface configured to allow the designer to create the call flow representation ([0221]), the method comprising:

adding a representation of a first prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the first prompt, the first prompt being defined to solicit a response from a user of the speech recognition application call flow ([0213]);

adding a representation of at least one grammar, selected by the designer from a list of existing grammars, to the call flow representation in response to at least one designer instruction, received via the user interface ([0224]), to add the at least one grammar in association with the first prompt, the at least one grammar defining valid responses to the first prompt ([0233)]);

adding a representation of a response option to the call flow representation in response to at least one designer instruction, received via the user interface, to add the response option in association with the first prompt, the response option defining a valid response to the first prompt ([0215], consecutive multiple prompts dependent on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”);

adding a representation of a second prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the second prompt, the second prompt to be provided to the user should the user respond to the first prompt with one of the valid responses defined in the at least one grammar ([0215], consecutive multiple prompts dependent on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”);

adding a representation of a third prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the third prompt, the third prompt to be provided to the user should the user respond to the first prompt with the response option ([0215], consecutive multiple prompts dependent

on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”)

automatically generating the speech recognition application call flow from the call flow representation such that if the response option is defined as a valid response in the at least one grammar ([0215], consecutive multiple prompts dependent on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”), the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option

However, Ehsani fails to teach adding a representation of a second prompt to the call flow representation

adding a representation of a third prompt to the call flow representation

the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option

Marx teaches a user interface for the design and implementation of a call flow (Fig. 7) having a set of parameters and recognized vocabularies (Fig. 8), wherein Marx teaches well known uses of call flow designs having multiple prompts, where Marx teaches an application that outputs an audible speech signal to the caller by, for example, playing a prerecorded prompt or using a speech generator such as text-to-speech converter: "If you know the name of the person you wish to speak to, please say the first name followed by the last name now. If you would like to speak to an operator,

please say `Operator` now." The application then waits for a response from the caller (130) and processes the response when received (140). If the caller says, for example, "Mike Smith," the application must be able to recognize what the caller said and determine whether there is a Mike Smith to whom it can transfer the call. Robust systems should recognize common variations and permutations of names. For example, the application of FIG. 1 may identify members of a list of employees of Company A by their full names--for example, "Michael Smith." However, the application should also recognize that a caller asking for "Mike Smith" (assuming there is only one employee listed that could match that name) should also be connected to the employee listed as "Michael Smith." Assuming the application finds such a person, the application outputs a confirming prompt: "Do you mean `Michael Smith`?" (150). The application once again waits to receive a response from the caller (160) and when received (170), takes appropriate action (180). In this example, if the caller responded "Yes," the application might say "Thank you. Please hold while I transfer your call to Michael Smith," before taking the appropriate steps to transfer the call. FIG. 2 shows some of the steps that are performed for each interactive step of the interactive application of FIG. 1. Specifically, applying the process of FIG. 2 to the first interaction of the application described in FIG. 1, the interactive speech application outputs the prompt of step 120 of FIG. 1 (210). The application then waits for the caller's response (220, 130). This step should be implemented not only to process a received response, as shown in the example of FIG. 1 (140), but also to handle a lack of response. For example, if no response is received within a predetermined time, the application can be implemented

to "time out" (230) and reprompt the caller (step 215) with an appropriate prompt such as "I'm sorry, I didn't hear your response. Please repeat your answer now," and return to waiting for the caller's response (220, 130) (Marx Col. 1 lines 30-67).

Further, Marx improves these well known limitations by teaching call flow design using a call flow interface whereby valid user responses based on a vocabulary database and yes/no module are defined (Marx Col. 18 lines 47-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ehsani to incorporate adding a representation of a second prompt to the call flow representation, adding a representation of a third prompt to the call flow representation, and the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option as taught by Marx to allow for the design of a call flow with a yes/no option and a plurality of responses (Marx Col. 1 lines 30-67), wherein each response can be designed within the call flow to produce a plurality of different valid actions/prompts (Marx Col. 18 lines 47-56) which through templates are “optimized to provide the highest possible recognition accuracy and task completion rates” (Marx Col. 4 lines 20-33).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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